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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/521,770	03/09/2000	Curtiss Smith	GIC-PT103(D2391)	3732
24375	7590	07/06/2004		EXAMINER
VOLPE AND KOENIG, P.C. DEPT. MOT UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			MURPHY, TIMOTHY M	
			ART UNIT	PAPER NUMBER
			2611	3

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/521,770	SMITH, CURTISS
	Examiner Timothy Murphy	Art Unit 2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-10 is/are allowed.
- 6) Claim(s) \_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: ____.

**DETAILED ACTION**

1. This application is in condition for allowance except for the following formal matters:

The abstract of the disclosure is objected to because the abstract is greater than 150 words, and additionally contains the legal phrase "means" throughout. Correction is required. See MPEP § 608.01(b).

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

***Allowable Subject Matter***

4. The following is an examiner's statement of reasons for allowance:

Claims 1-10 are allowable because the prior art fails to teach or disclose a method or corresponding apparatus in which a program calculates the estimated node size for a network node comprising inputting: (a) upstream and downstream bandwidths, (b) node splitting information on the number of nodes sharing the same service, (c) limitations on unavailable passbands, (d) requirement information for services of at least one of analog broadcasts, digital broadcasts, polled access/control, cable modem, telephony, interactive video, and video on demand, including at least one of channel width and channel quantity for at least one of downstream and upstream services, and the type of data modulation and payload data rate per channel, (e) percentage of homes subscribing to a service, percentage of simultaneous homes using a particular service, and a desired downstream data rate to be received by each subscriber for each service, and (f) outputting a recommended number of home to be passed by the node.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

A background search found similar prior art, however, not completely as claimed. For example, Goode (6,718,552) discloses utilizing viewership statistics in order to dynamically allocate bandwidth in the order of the statistics priorities (col. 2, lines 50-67, and col. 4, lines 12-32), which provides the benefit of dynamically maximizing available bandwidth for all requested services (col. 3, lines 6-20). However, the node size is established in order to adjust the bandwidth; therefore, Goode fails to calculate a node size, as recited in the claims.

Another example of similar prior art is Adams (6,378,130). Adams discloses node group combiners, by utilizing a modulator array (70), and the number of columns within the array depends strictly on the number of subscriber terminals in which to be served (col. 9, lines 4-15). If the demand for on a node is becoming too great for the available bandwidth, a new node group is simply formed by adding another column to the modulator array (col. 9, lines 17-23). However, the number of subscribers, or homes passed, is a set value and the load on the node from the network is adjusted by adding another node group. Therefore, Adams fails to calculate a node size, as recited in the claims.

A third example of similar prior art is Safadi (5,696,765). Safadi discloses a network controller (62), which is capable of dynamically assigning various input parameters for network control as required (see col. 10, line 45 – col. 11, line 25).

These parameters include upstream signaling rates (col. 12, lines 62-65), dynamically assigning frequencies (col. 10, lines 63-65), bit-rates (col. 18, lines 42-50). Although the invention allows for dynamic network management, it only allows for network growth based on demand by adding additional network controllers to the respective headend (col. 16, lines 14-20). Therefore, Safadi fails to calculate the node size, as recited in the claims.

A fourth example of similar prior art is Chappell (6,425,132). Chappell discloses a system which allows a technician to test a CATV node (col. 5, line 62 – col. 6, line 30). The test allows for inputs such as testing a particular frequency band (col. 9, lines 42-49). However, the test provides measurements for ingress detection (as indicated in col. 5, line 62 – col. 6, line 30). Therefore, Chappell fails to calculate a node size, as recited in the claims.

### ***Conclusion***

5. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

### **Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

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(Date)

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### **Certificate of Transmission**

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (703) \_\_\_\_ - \_\_\_\_\_ on \_\_\_\_\_.  
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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

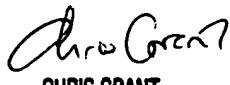
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Murphy whose telephone number is (703) 305-8144. The examiner can normally be reached on Monday through Thursday 8am – 5pm, and alternating Fridays 8am – 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the senior examiner, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Timothy M. Murphy  
Patent Examiner  
Art Unit 2611

tmm

  
CHRIS GRANT  
PRIMARY EXAMINER